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decide if the request for the channel state information update is to be sent to the other apparatus based at least on the logical value and time elapsed since the last CSI update.

30. The apparatus of claim 25, further comprising:
a transmitter configured to transmit, to the other apparatus based on the decision, the request for the CSI update.

31. The apparatus of claim 30, wherein the request for the CSI update comprises at least one of a training request message or a channel sounding message.

32. An apparatus that supports an adaptive user dependent channel state information (CSI) feedback rate in a multi-user wireless communication system, comprising:

means for obtaining a current channel estimate and a recent channel estimate from another apparatus;

means for calculating a metric based at least on the current channel estimate and the recent channel estimate; and
means for comparing the metric with a threshold for deciding if a request for a CSI update is to be sent to the other apparatus.

33. The apparatus of claim 32, comprising access point.

34. The apparatus of claim 32, wherein deciding to request the CSI update is based at least on the metric and time elapsed since a most recent CSI update.

35. The apparatus of claim 32, wherein the threshold is based on a signal to noise ratio (SNR) of a channel used by the apparatus.

36. The apparatus of claim 35, wherein the means for deciding if a channel state information request is to be sent to the other apparatus comprises:

means for deciding if the request for the CSI update is to be sent to the other apparatus based at least on the logical value and time elapsed since a most recent CSI update.

37. The apparatus of claim 32, further comprising:
means for transmitting, to the other apparatus based on the decision, a request for the CSI update.

38. The apparatus of claim 37, wherein the request for the CSI update comprises at least one of a training request message or a channel sounding message.

39. A computer-program product that supports an adaptive user dependent channel state information (CSI) feedback rate in a multi-user wireless communication system, comprising a non-transitory computer-readable medium comprising instructions executable to:

obtain a current channel estimate and a recent channel estimate from an apparatus;

calculate a metric based at least on the current channel estimate and the recent channel estimate; and
compare the metric with a threshold for deciding if a request for a CSI update is to be sent to the apparatus.

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40. An access point that supports an adaptive user dependent channel state information (CSI) feedback rate in a multi-user wireless communication system, comprising:

at least one antenna;

a receiver configured to obtain via the at least one antenna a current channel estimate and a recent channel estimate from a wireless node;

a circuit configured to calculate a metric based at least on the current channel estimate and the recent channel estimate; and

another circuit configured to compare the metric with a threshold to decide if a request for a CSI update is to be sent to the wireless node.

41. The method of claim 1, wherein the metric is calculated according to the following:

$$D_{CSI} = \frac{\|H_{old} - H_{new}\|^2}{\|H_{old}\| \|H_{new}\|}$$

wherein D_{CSI} is the metric, H_{new} is a latest downlink complex channel estimate measured at the first apparatus, and H_{old} is a complex channel estimate most recently fed back to the second apparatus.

42. The method of claim 1, wherein the metric is calculated according to the following:

$$D_{CSI} = \left| \frac{H_{old} \cdot H'_{new}}{\|H_{old}\|} \|H_{new}\| \right|$$

wherein D_{CSI} is the metric, H_{new} is a row vector containing a latest downlink complex channel estimates for a single antenna measured at the first apparatus and H_{old} is a row vector containing downlink complex channel estimates for a single antenna most recently fed back to the second apparatus.

43. The method of claim 1, wherein the metric is calculated according to the following:

$$D_{CSI} = \left| \arg \left(\frac{H_{old} \cdot H'_{new}}{\|H_{old}\| \|H_{new}\|} \right) \right|$$

wherein D_{CSI} is the metric, H_{new} is a latest downlink complex channel estimate for a single antenna measured at the first apparatus and H_{old} is a downlink complex channel estimate for a single antenna most recently fed back to the second apparatus.

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